

SolarEdge Response to Staff Proposal on Reactive Power Priority Setting of Smart Inverters

1. Do you agree that transitioning to reactive power priority will better support voltage regulation and help to reduce distribution upgrade costs associated with high penetrations of DERs, and if so, why? Parties should offer the pros and cons of adopting reactive power priority.
 - a. I agree, this is already being done in other countries and will be required in Hawaii next month. The Pro's are that this aligns with the rest of the world and IEEE 1547 2017. The con is that system owners will need a way to estimate the financial impact on their PV systems' ROI. Today these tools don't exist to the masses and we are getting asked frequently how to estimate the real power reduction and apply it to a system's payback analysis. NREL produced a public paper with modeled results for Hawaii (VROS study). A public paper like this specific to California would be helpful for system owners and financiers.
2. Does the proposed tariff language adequately reflect the goal of the text change, i.e. to ensure reactive power priority, and if not, how can the text be modified?
 - a. Looks OK to me
3. Is the proposed date optimal and achievable, and if not, what is the preferred date and why? Please be specific in your reasoning. For instance, you may indicate what tasks and lengths of time are necessary to comply.
 - a. Yes this is reasonable and our equipment already complies today. Changing active vs. reactive is simple setting in the software.
 - b. Once consideration on this date is how inverters are labeled to indicate reactive power capability. For example using a KW rating vs. a KVA rating on the nameplate. IEEE 1547 2017 addresses this, but manufactures may need time to change their labeling strategy, marketing materials, websites, if labeling needs to be changed by Jan 2018 since that is less than 4 months away. There may also be some implication with the CEC equipment list or other lists that typically reflect only kW ratings.
4. If the change to reactive power should not be adopted, please give specific reasons why not. Parties may provide any research and/or evidence available to demonstrate from a technical standpoint that real power priority should be kept in favor over transitioning to reactive power priority.